SONY 3-242-997-12 (1)

IC Recorder

Operating Instructions

Owner's Record

The model number is located at the rear and the serial number is located inside the battery compartment. Record the serial number in the space provided below. Refer to these numbers whenever you call upon your Sony dealer regarding this product.

Serial No.



ICD-B5

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http://www.sony.net/

Information

IN NO EVENT SHALL SELLER BE LIABLE FOR ANY DIRECT INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY NATURE, OR LOSSES OR EXPENSES RESULTING FROM ANY DEFECTIVE PRODUCT OR THE USE OF ANY PRODUCT.

For the customers in the U.S.A.

INFORMATION

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which car be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measu

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

Precautions

cause undesired operation.

• Operate the unit only on 3 V DC. Use two LR03 (size AAA) alkaline batteries

• Do not operate the unit while driving, cycling or operating any motorized vehicle

• Do not leave the unit in a location near heat sources, or in a

- place subject to direct sunlight, excessive dust or mechanical
- Should any solid object or liquid fall into the unit, remove the batteries and have the unit checked by qualified personnel before operating it any further.

- Noise may be heard when the unit is placed near an AC power source, a fluorescent lamp or a mobile phone during Noise may be recorded when an object, such as your finger,
- etc., rubs or scratches the unit during recording.

· To clean the exterior, use a soft cloth slightly moistened in water. Do not use alcohol, benzine or thinner.

Keep personal credit cards using magnetic coding or springwound watches, etc., away from the unit to prevent possible damage from the magnet used in the speaker.

If you have any questions or problems concerning your unit, please consult your nearest Sony dealer.

Backup recommendations

To avoid potential risk of data loss caused by accidental operation or malfunction of the IC recorder, we recommend that you save a backup copy of your recorded messages on a tape recorder, etc.

Troubleshooting

Before taking the unit for repair, check the following sections. Should any problem persist after you have made these checks, consult your nearest Sony dealer.

The unit does not operate.

- The batteries have been inserted with incorrect
- The buttons are locked with the HOLD switch. (If you press any button, "HOLD" will flash three

No sound comes from the speaker.

• The earphone or headphones are plugged in. The volume is turned down completely.

"FULL" is displayed and you cannot start recording.

The memory is full. Erase some of the messages 99 messages has been recorded in the selected folder. Select another folder or erase some of the

Noise is heard.

- · An object, such as your finger, etc., accidentally rubbed or scratched the unit during recording so that noise was recorded.
- The unit was placed near an AC power source, a fluorescent lamp or a mobile phone during recording or playback
- · Plug of the connected microphone was dirty when recording. Clean the plug.
- Earphone/headphones plug is dirty. Clean the

Recording level is low.

Press MIC SENS to display "HIGH"

Recording level is unstable (when recording music, etc.).

- This unit is designed to automatically adjust the recording level when recording meetings, etc., and is not suitable for music recording.
- "-M--D ---:-" is displayed. You have not set the clock

"-M--D ---:-" is displayed on the REC DATE display.

• The date of recording will not be displayed if you recorded the message when the clock was not set

You cannot add an index.

- You cannot add an index in a folder which has 99
- · If you add indexes frequently, the unit may become unable to add indexes
- You cannot add an index in the first or the last 1 second of a message

You cannot erase the index.

· If you erase indexes frequently, the unit may become unable to erase indexes.

You cannot record messages up to the

- maximum recording time (150 minutes). No more recording can be made when 99 messages
- each have been recorded in both A and B folders · Due to the limitation of the IC recording system, this unit records in the minimum recording unit of approx. 9 seconds. If the length of each message cannot be divided by the minimum recording unit, the remaining recording time may decrease by more than the total length of the messages.

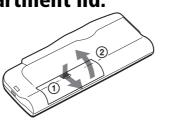
The unit does not operate correctly. • Take out the battery and insert it again.

Please note that recorded messages may be erased during service or repair work.

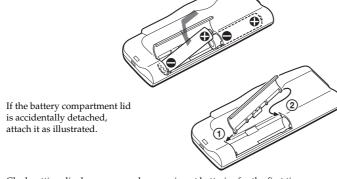
▶ Getting started

Step 1: Installing the Batteries





Insert two LR03 (size AAA) alkaline batteries with correct polarity, and close the



Clock setting display appears when you insert batteries for the first time, or when you insert batteries after the unit has been without batteries for a certain period of time. Please refer to Steps 2 to 3 in "Step 2: Setting the Clock" to set the

Replacing the batteries window shows the battery

condition When flashes, replace the When flashes, the batteries are exhausted and the unit will stop operation.

Battery life*

With continuous use, approx. 10 hours recording/8 hours playback is

Using Sony alkaline batteries LR03 (size AAA) When playing back through the

internal speaker with VOL control at around 4 The battery life may shorten depending on the operation of the

· Do not use manganese batteries for

 When you replace the batteries, insert the new ones within 3 minutes after you removed the exhausted ones. Otherwise, the display may show the clock setting display or incorrect date and time when you reinsert the batteries. In this case, set the date and time

The recorded messages and alarm setting, however, will remain. When replacing the batteries, be

- sure to replace both batteries with new ones. Do not charge dry batteries.
- When you are not going to use the unit for a long time, remove the patteries to prevent damage from battery leakage and corrosion.

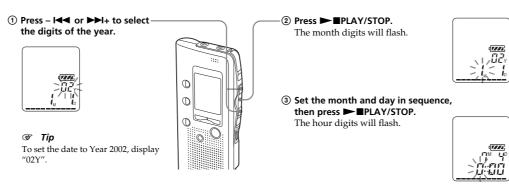
Step 2: Setting the Clock

Clock setting display appears when you insert batteries for the first time, or when you insert battery after the unit has been without battery for a certain period of time. In this case, proceed from step 2.

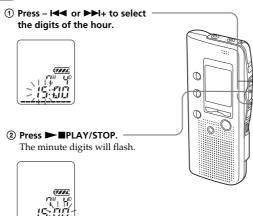




Set the date.

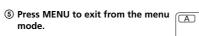


Set the time.



3 Set the minute







III TE

This unit does not have a power on/off switch. The display is shown at all

▶Basic Operations

Recording Messages

You can record up to 99 messages in each of the two folders (A and B). Since a newly recorded message is automatically added behind the last recorded message, you can start recording quickly without searching for the end of the

Note on recording

Noise may be recorded if an object

such as your finger, etc., accidentall

Maximum recording time

rubs or scratches the unit during

You can record for up to 150

minutes. You can check the

remaining amount of recording

time by selecting the remaining

recording time display mode.

Due to the limitation of the IC

the minimum recording unit of

approx. 9 seconds, therefore the

following symptoms may occur:

recording system, this unit records in

. When a message is shorter than the

remaining recording time will

minimum recording unit, the

unit without a remainder.

• The sum of the number on the

may be less than the unit's

Remaining memory

When the remaining time of

When the remaining time of

selected display mode and

the memory is full, recording

with an alarm sound. To continue

recording, first erase some of the

If you press ●REC/STOP when the

memory is full, "FULL" will flash

If you press ●REC/STOP after you

have recorded 99 messages, "FULL" will flash with an alarm sound.

Select another folder or erase some o

the messages before you start

recording again.

with an alarm sound. Erase some of

indication

maximum recording time (150

counter (elapsed recording time)

and the remaining recording time

nearly full.

remaining recording time will

decrease by more than the actual

length of the message if it cannot be

divided by the minimum recording

length of the message

decrease by more than the actual

When the message is longer than the

minimum recording unit, it is still

counted as approx. 9 seconds so the

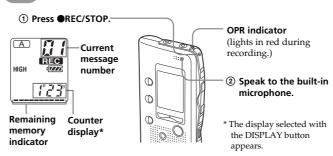
e.g. Message 1 Message 2 Newly recorded message Blank space

Before making a long recording, be sure to insert new batteries and check the battery

Select the folder.



Start recording.



You do not need to keep pressing ●REC/STOP while recording.



If you do not change the folder after you stop recording, the next time you record you will record in the same folder

То	Do this		
stop recording	Press STOP instead of ●REC/STOP.		
pause recording*	Press IIPAUSE. During recording pause, the OPR indicator flashes in red and "PAUSE" flashes in the display window.	A REG	

release pause and resume recording	Press IPAUSE or •REC/STOP. Recording resumes from that point. (To stop recording after pausing recording, press STOP.)
listen to the current recording	Press ●REC/STOP or STOP to stop recording, then press ▶■PLAY/STOP.
review the current recording instantly	Press ►■PLAY/STOP during recording.
select the microphone sensitivity	You can select the microphone sensitivity to display the following by pressing MIC SENS. HIGH: To record at meeting or in a quiet and/or spacious place.

* About one hour after you pause recording, recording pause is automatically released

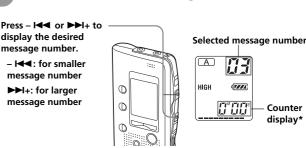
and the unit goes into the stop mode

Playing Back Messages

When playing back a previously recorded message, start from Step 1. When playing back a message you have just finished recording, start from Step 3.



Select the message number.



* The display selected with the DISPLAY button appears (see the reverse side).



After playing back one message, the unit stops at the beginning of the next message. When the continuous play function is set to "ON" (see the reverse side), the unit stops after playing all messages in a folder. When the last message on a folder has been played back, the unit stops at the beginning of the last message

For private listening

Connect an earphone or headphones (not supplied) to the EAR jack. The built-in speaker will be automatically disconnected. If you plug in headphones, you will get output from the left channel only. If noise is heard, wipe the headphones

Other operations

То	Do this
stop at the beginning of the current message	Press STOP.
stop at the current position (Playback Pause function)*	Press ►■PLAY/STOP. To resume playback from that point, press ►■PLAY/STOP again.
go back to the beginning of the current message	Press – ► once.
skip to the next message	Press ▶►I+ once.
go back to previous messages/skip to succeeding messages	Press – I ← or ► + repeatedly. (During stop mode, keep the button pressed to skip the messages

You can also pause playback by pressing **■PAUSE** instead of **▶■PLAY/STOP**. The OPR indicator will flash in green. After about one hour, the unit goes into the stop mode at the current position.

Plaving back a message repeatedly

— Repeat Play

►■PLAY/STOP for more than "

" will be displayed and the

selected message will be played back repeatedly. To resume normal playback, press ► ■PLAY/STOP again. To stop playback, press STOP.

Playing the beginning of each message — Scanning Play During stop mode, r

►■PLAY/STOP for more than one second.

"SCAN" will be displayed in the display window and the first 5 seconds of each message in the selected folder will be played back When you find the desired message, press ►■PLAY/STOP The message will be played back until the end.

Searching forward/ backward during playback (Cue/Review) To search forward, keep ▶▶I-

pressed during playback and release the button at the point you wish to resume playback. To search backward, keep - ► pressed during playback and release the button at the point you wish to resume playback.

If you keep ▶► + or - ► pressed for more than 10 seconds, the unit starts to search at higher speed. For the first 10 seconds of cue/ review, fast playback sound can be heard. When searching at a higher speed, playback sound will not be During cue/review, the counter

will be displayed, regardless of the display mode setting. ⊕ Tip

When fast playback is done to the end of the last message, "END" flashes 3 times. (You cannot hear the playback sound.) If you keep – ◄ pressed while "END" is flashing, the messages are played back rapidly, and normal playback will start at the point you release the button. When "END" stops flashing and the OPR indicator goes off, the unit will

stop at the beginning of the last If the last message is long and you wish to start playback at a later part of the message, keep ▶► + pressed to play back the message to the end and then press – ► while "END" is

flashing to go back to the desired (For messages other than the last one, go to the beginning of the next message and play backward to the

desired point.)

Erasing Messages

You can erase the recorded messages one by one or all messages in a folder at a Note that once a recording has been erased, you cannot retrieve it.

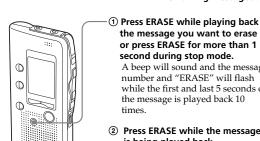
Erasing messages one by one

When a message is erased, the remaining messages will advance and numbered so that there will be no space between messages.



Remaining messages are renumbered

ERR SE



1) Press ERASE while playing back the message you want to erase or press ERASE for more than 1 second during stop mode. A beep will sound and the message number and "ERASE" will flash while the first and last 5 seconds of the message is played back 10

is being played back. The message is erased and the

remaining messages will be renumbered. (For example, if you erase Message 3, Message 4 will be renumbered as Message 3. When erasing is completed, the unit will stop at the beginning of the

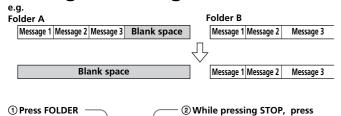
To cancel erasing

To erase other messages Repeat steps ① and ②.

To erase a message partially

First divide the message by adding an index and then follow the steps

Erasing all messages in a folder



"ALL ERASE" will flash for 10 want to erase ERR SE 3 While the display is flashing, press 7777 ERASE.

Main unit

(built-in microphone)

(microphone sensitivity)

Display window

FOLDER -

INDEX DISPLAY

MENU -

ERASE -

STOP —

MIC SENS

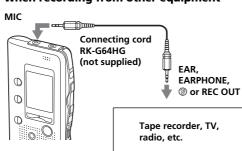
Index to Parts and Controls

To cancel erasing Press STOP before step 3



When you connect an external microphone, the built-in automatically supplied to the microphone from the IC recorder.

When recording from other equipment



2 Follow the steps in "Recording messages" to

- connections and volume control.
- When connecting equipment other than Sony's, refer to the instruction manual of the equipment.

VOL (volume)

(PLUG IN POWER)

EAR (earphone) jack

- OPR (operation) indicator

●REC (record) /STOP

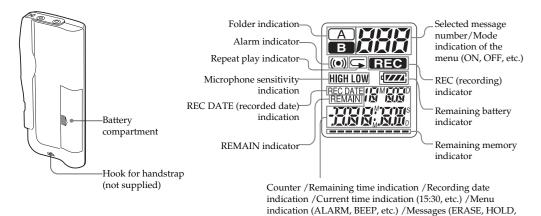
II PAUSE

▶H+CUE

HOLD

Display window

- ► REVIEW



▶ Various Ways of Recording

message and counted as a part of the message

Adding a Recording to a **Previously Recorded Message**

You can add a recording to the message being played The added recording will be placed after the current

Message 3 Message 4 adding a Added recording Meeting at 2 o'clock on December 1. at Conference room A

1 During playback, press ●REC/ STOP for more than 1 second. The REC indicator appears and "PLUS" flashes three times on the display window The OPR indicator will turn red. The new recording will be added at

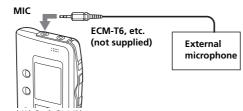
2 Press ●REC/STOP or STOP to stop the

the end of the current message.

Recording with an External Microphone or from Other **Equipment**

1 Connect a plug-in-power type microphone or other equipment to the MIC (PLUG IN POWER)

When recording with an external



microphone is automatically cut off. When a plug in power type microphone is connected, power is

record messages.

- · Make sure that the plugs are connected securely
- We recommend you make a trial recording to check the

▶Other Functions

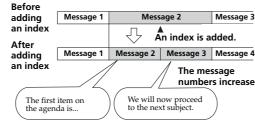
Dividing a Message into Two/ Combining Messages — Index Function

You can divide a message by adding an index, or combine messages by erasing the index. While recording/playing back messages, you can add an index (see below). In stop mode, you can erase the index

Dividing a Message by Adding an

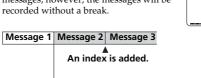
playback. By dividing a message, you can easily find the point you want to play back when you make a long recording such as a meeting. When you add an index, the message numbers will increase as follows.

You can add an index to a message during recording or



To mark an index during recording While recording a message, press INDEX at the point you want to divide.

The new message number flashes three times at the point you pressed INDEX. The message will be divided in two messages; however, the messages will be recorded without a break.



Recording continues

You can add an index during recording pause

To add an index during playback While playing back a message, press INDEX at the point you want to divide.

The message is divided in two and the new message number flashes three times. An index mark is added and the following index numbers will increase by

You can add an index after you have paused playback with

To play the message you marked with an

Press – I or ▶►I+ to display the message number as the divided messages each have message numbers

To play the divided messages continuously Select "ON" for "CONT" as described in "Playing Back All Messages in a Folder Continuously.

- If 99 messages have been recorded in a folder, you cannot add an index. In that case, reduce the number of messages to 98 or less by erasing unnecessary messages or by moving some of the messages to another folder before adding an
- If you add an index to a message with an alarm setting, the alarm setting remains only with the former message divided

Combining Messages by Erasing the Index

You can combine two messages into one by erasing the

Message 1 Message 2 Message 3 Message 4 An index is erased.

Message 2 Message 3

The message numbers decrease

In stop mode, follow the steps below:

1 Press – I or ►►I+ to display the number of the second of the two messages you want to

2 While pressing ERASE, press EPR SE INDEX for more than 1 second. "ID ERASE" will flash for 10 seconds.

3 Press ERASE while the display is flashing. The two messages are combined into one and the messages will be renumbered as in the illustration

To cancel erasing

Press STOP before step 3

Notes on adding/erasing index When recording with an IC recorder, the following symptoms

may occur because of the limitation of the system, however, they are not malfunction. If you add/erase indexes frequently, the unit may become

- unable to add/erase indexes. . You cannot add an index in the first or the last 1 second
- After combining messages by erasing an index, the latter message's alarm setting will be erased

Moving Messages to a Different Folder — Move Function

You can move the recorded messages to another folder.

Example: Moving Message 3 in Folder A to Folder B 1 Play back the message you want **▶**■PLAY/STOP.

While playing back the message, press FOLDER to flash the indication of the folder to which you want to move the message (B in this case). The first and last 5 seconds of the message will be played back 10 times, while the folder indication and "MOVE" flash.

B 25 3 Press ►■PLAY/STOP. The message is moved in the (**7777**) destination folder. Messages are sorted in order of the recorded date and time To cancel moving the message(s)

Press STOP before step 3.

The move function does not duplicate a message in another in the previous folder will be deleted.

Playing Back a Message at a **Desired Time with an Alarm**

You can sound an alarm and start playback of a selected message at a desired time

1 Use FOLDER and – I◄◄ / ▶ I+ to select the folder and the message you want to play back

2 Enter the alarm setting mode. Press MENU.

The unit enters the menu mode III-F and "ALARM OFF" will be (**7///** (If "ALARM ON" is displayed, the alarm has been set. If you do 81.8 811 not wish to change the setting, press MENU and exit the menu mode.)

Note

"ALARM OFF (or ON)" will not appear and the alarm cannot be set if the clock has not been set or no message has been recorded in the selected folder.

② Press ►■PLAY/STOP "OFF" starts to flash. 81.8 811 ③ Press – I◄ or ▶►I+ to flash

81.889 ④ Press ►■PLAY/STOP. "DATE" will flash in the display DR TE

3 Set the alarm date.

To play back on a desired date (the message will be played back at the same time on the same date every year until you erase the

① Press ►■PLAY/STOP while "DATE" is flashing. The month digits will flash.

19158 ② Press – I◄ or ►►I+ to select the month digits and press ■PLAY/STOP. The day digits will flash.

Press – I◀◀ or ▶►I+ to select the day digits. To play back once a week Press – I◀◀ or ▶▶I+ to select

the day of the week.

"DAILY".

To play back at the same time

(A) Press – I◀◀ or ▶▶I+ to select 7777 118 11 9

:FP1:

4 Press ►■PLAY/STOP The hour digits will flash.

5 Set the alarm time. Press – I◄◄ or ▶►I+ to select the hour digits and press

the minute digits and press

displayed to indicate that the

setting has been completed.

77<u>7</u>7 The minute digits will flash. ② Press – I◄◄ or ▶►I+ to select

"ALARM ON" and "(•)" will be 81.8 811

6 Press MENU to exit the menu

►■PLAY/STOP.



"(•)" is displayed when the number of the message with

At the set time, the alarm will sound for about 10 seconds and the selected message will be played back During playback, "ALARM" will flash in the display

When the playback ends, the unit will stop automatically at the beginning of that message

To listen to the same message again Press ▶■PLAY/STOP. The same message will be played back from the beginning.

To cancel the alarm setting before the playback starts Press STOP while the alarm sound is heard. You can stop even when the HOLD function is activated.

- . You cannot set the alarm if you have not set the clock or there is no message in the selected folder (the unit will not enter the alarm setting mode when you press MENU in Step 2). • If you try to set the alarm to play back a message at a
- previously set time on another message, "PRE SET" will be displayed, preventing new settings. If the alarm time comes while another message is being played back with an alarm, the playback stops and the new
- ssage will be played back. If the alarm time comes during recording, alarm will sound for 10 seconds after the recording is finished and playback
- If more than one alarm time comes during recording, only the first message will be played back. • When the alarm time comes when the unit is in the menu mode, alarm will sound and the menu mode will be

begins. "(*)" will flash when the alarm time come

- If you erase the message you set the alarm to play back, the alarm setting will be cancelled.
- If you add an index to the message you set the alarm to play
- back, playback will stop at the index. . If you erase the index on the message you set the alarm to play back, the alarm setting will be cancelled
- You can adjust the playback volume with the VOL control. If the alarm time comes during erasing, alarm will sound for
- 10 seconds after the erasing is finished and playback begins. · Alarm setting will not be cancelled when the alarm playback finishes. To cancel alarm setting, see below

To cancel the alarm setting or change the alarm time

- 1 Select the message you set the alarm to play back, and press MENU.
- "ALARM ON" will be displayed. 2 Press ►■PLAY/STOP to flash "ON". 3 To cancel the alarm setting: Press – I or ►►I+ to flash "OFF" and press ▶■PLAY/STOP. To change the alarm date and time: Press

►■PLAY/STOP. When the alarm date is displayed

follow the steps 3 to 5 above to change the alarm date and time. 4 Press MENU to exit the menu mode.

Preventing Accidental Operation — HOLD function



Slide the HOLD switch in the direction of the arrow. "HOLD" will flash three times, indicating that all the functions of the buttons are locked. To cancel the HOLD function, simpl slide the HOLD switch in the opposite

When the HOLD function is activated during recording, cancel the HOLD function first to stop recording.

direction.

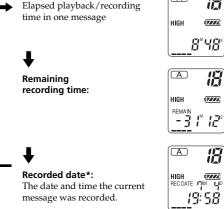
Even if the HOLD function is activated, you can stop the alarm playback. To stop the alarm or playback, press STOP

(**7///**

Selecting the Display Mode

You can select the display mode for the stop, recording and playback modes. (If the unit is left unoperated for more than 3 seconds in the stop mode, the display will show the current time, regardless of the display mode

Each time you press DISPLAY, the display mode will change as shown below:



* If the clock has not been set, "-M--D ---:-" will be displayed.

Turning off the Beep Sound

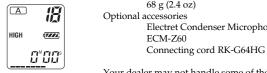
BEEP ON: A beep will sound to indicate that operation has been accepted. BEEP OFF: No beep sound will be heard except for the alarm and timer.

7/// ALA PA 2 Press – I◀◀ or ▶▶I+ to display "BEEP ON (or OFF)" and press **▶**■PLAY/STOP. "ON (or OFF)" will flash. BE EP

1 Press MENU to enter the menu

3 Press – I or ►►I+ to select "ON" or "OFF" and press **▶**■PLAY/STOP. The setting is completed. BE EP

4 Press MENU to exit the menu



What beep sound means

Beep patterns		Meaning	
-	(single tone)	Usual mode	
	(double tone)	Enter/exit special mode	
	(triple tone)	Notice*	
	(forth tone)	Lack of battery power.	

---- (continuous beep) Alarm set time has come. This pattern lets you know the procedure is wrong or informs you of some messages, such as:
- you are trying to record a message when you have already

recorded up to the maximum recordable time or the maximum number of messages you reaches at the top of the first message or end of the last

Playing Back All Messages in a **Folder Continuously**

CONT ON: You can play back all messages in a folder CONT OFF: Playback stops at the end of each message.

1 Press MENU to enter the menu

Press – I◀◀ or ▶▶I+ to display "CONT" and press ►■PLAY/ CONT

ALA PA

Press – I◀◀ or ▶▶I+ to select "ON" or "OFF" and press ■PLAY/STOP. Now the setting is completed

"OFF (or ON)" will flash.

4 Press MENU to exit the menu



<u>Eunt</u>

(**7////**

Specifications

Recording media Built-in flash memory, Monaural recording Recording time

150 minutes Frequency response 150 Hz - 3,500 Hz Speaker approx. $3.2 \text{ cm} (1 \, \frac{5}{16} \text{ in.}) \text{ dia.}$

Plug in power

Power output 150 mW

Input/Output • Earphone jack (minijack) for 8 - 300 ohms earphone/headphones Microphone jack (minijack, monaural)

mum input level 0.6 mV 3 kilohms or lower impedance microphone Two LR03 (size AAA) alkaline batteries: 3 V DC

Dimensions (w/h/d) (not incl. projecting parts and $44.5\times105.3\times14.0$ mm (1 $^{13}/_{16}\times4$ $^{1}/_{4}\times$ $^{9}/_{16}$ in.) Mass (incl. batteries

68 g (2.4 oz) Electret Condenser Microphone ECM-T6,

Your dealer may not handle some of the above listed optional accessories. Please ask the dealer for detailed

Design and specifications are subject to change without